

530230 Mesoscale Atmospheric Network: Syllabus

Monday 12 February

Exactum B120

9:00–9:10 Course administration and class projects (Schultz)

9:10–9:30 Perspective on the Testbed: If you build it, they will come (Schultz)

9:30–10:30 Helsinki Testbed overview, including significance for new business developments, significance for meteorological research, and comparison to standard observing network (Turtiainen and Poutiainen)

10:30–11:00 BREAK

11:00–11:20 What the Testbed means for Helsinki (Kulmala)

11:20–12:10 Oklahoma Mesonet (Schultz)

12:10–1:10 LUNCH

Exactum C323

1:10–2:00 Mesowest (Schultz)

2:00–2:30 Instrumentation 1: Weather and precipitation sensors (Turtiainen)

2:30–2:50 BREAK

2:50–3:10 Instrumentation 2: Road weather sensors (Haavasoja)

3:10–3:30 Instrumentation 3: Remote-sensing profiling instruments (Poutiainen)

3:30–3:50 Communication and data transmission (Turtiainen)

3:50–4:10 BREAK

4:10–5:00 Instrumentation 4: Radar and disdrometers (Saltikoff and Pohjola)

Tuesday 13 February

Exactum B120

9:00–9:45 Operational quality control (Turtiainen)

9:45–10:30 Research quality control (Hasu)

10:30–11:00 BREAK

11:00–12:00 Data assimilation and numerical weather prediction (Schultz)

12:00–1:00 LUNCH

Exactum C323

1:00–2:00 Research methods: Things to do with Testbed data (Schultz)
Synoptic analysis, compositing, climatologies, applications, societal impacts

2:00–2:20 Applications 1: Forest-fire index (Vajda)

2:20–2:40 BREAK

2:40–3:20 Formation of groups for class projects

3:20–3:40 BREAK

Dynamicum 1D20c

3:40–5:00 How to obtain data, including Researcher's Interface (Parviainen and Poutiainen)

Wednesday 14 February

Dynamicum 1D20c

9:00–10:30 How to obtain data, including Met Editor (Pietarinen)

10:30–11:00 BREAK

Exactum B222

11:00–12:00 Applications 2: Road weather (Kangas, Hippi, Ruuhela)

12:00–1:00 LUNCH

Exactum D123

1:00–1:45 Applications 3: Air quality (Ari Karppinen), SMEAR III station (??)

1:45–2:15 BREAK

Exactum B222

2:15–3:00 Applications 4: Climate (Ruuhela)

3:00–3:30 Applications 5: Hazardous weather (Punkka)

3:30–5:00 Individual group discussion on class projects

Thursday 15 February

Exactum C323

9:00–10:00 Good scientific writing (Schultz)

10:00–11:00 Good scientific presentations (Schultz)

11:00–12:00 Individual group discussion on class projects

12:00–1:00 LUNCH

Exactum BK114, C323 (1–2 p.m.) or D123 (after 2 p.m.)

1:00–5:00 Individual group discussion on class projects

Friday 16 February

Exactum BK114, B120

9:00–10:30 Individual group discussion on class projects

10:30–11:00 BREAK

11:00–12:00 Individual group discussion on class projects

12:00–1:00 LUNCH

Exactum B120

1:00–2:30 Group presentations and comments 1

2:30–3:00 BREAK

3:00–3:50 Group presentations and comments 2

3:50–4:10 BREAK

4:10–5:00 Group presentations and comments 3